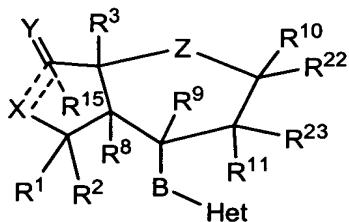


5 We claim:

1. A method of treating a therapeutic condition comprising administering to a mammal in need of such treatment an effective amount of at least one compound of the formula:

10



or a pharmaceutically acceptable isomer, salt, solvate or co-crystal form thereof, wherein:

15 Z is  $-(CH_2)_n-$ ,  $(CH_2)_n$   $R^{34}$ ,  $(CH_2)_n$  when  $R^{10}$  is absent, or

$(CH_2)_n$  when  $R^3$  is absent;

the single dotted line adjacent to  $R^{34}$  represents an optional double bond;

the double dotted lines adjacent to X together represent an optional single bond;

20

n is 0-2;

R<sup>1</sup> and R<sup>2</sup> are independently selected from the group consisting of H, C<sub>1</sub>-C<sub>6</sub> alkyl, fluoro(C<sub>1</sub>-C<sub>6</sub>)alkyl, difluoro(C<sub>1</sub>-C<sub>6</sub>)alkyl, trifluoro-(C<sub>1</sub>-C<sub>6</sub>)alkyl, C<sub>3</sub>-C<sub>7</sub> cycloalkyl, C<sub>2</sub>-C<sub>6</sub> alkenyl, aryl(C<sub>1</sub>-C<sub>6</sub>)alkyl, aryl(C<sub>2</sub>-C<sub>6</sub>)alkenyl, heteroaryl(C<sub>1</sub>-C<sub>6</sub>)alkyl, heteroaryl(C<sub>2</sub>-C<sub>6</sub>)alkenyl, hydroxy-(C<sub>1</sub>-C<sub>6</sub>)alkyl, (C<sub>1</sub>-C<sub>6</sub>)alkoxy(C<sub>1</sub>-C<sub>6</sub>)alkyl, amino-(C<sub>1</sub>-C<sub>6</sub>)alkyl, aryl and thio(C<sub>1</sub>-C<sub>6</sub>)alkyl; or R<sup>1</sup> and R<sup>2</sup> together

25

form a =O group;

R<sup>3</sup> is H, hydroxy, C<sub>1</sub>-C<sub>6</sub> alkoxy, -NR<sup>18</sup>R<sup>19</sup>, -SOR<sup>16</sup>, -SO<sub>2</sub>R<sup>17</sup>, -C(O)OR<sup>17</sup>, -C(O)NR<sup>18</sup>R<sup>19</sup>, C<sub>1</sub>-C<sub>6</sub> alkyl, halogen, fluoro(C<sub>1</sub>-C<sub>6</sub>)alkyl, difluoro(C<sub>1</sub>-C<sub>6</sub>)alkyl, trifluoro(C<sub>1</sub>-C<sub>6</sub>)alkyl, C<sub>3</sub>-C<sub>7</sub> cycloalkyl, C<sub>2</sub>-C<sub>6</sub> alkenyl, aryl(C<sub>1</sub>-C<sub>6</sub>)alkyl, aryl(C<sub>2</sub>-C<sub>6</sub>)alkenyl, heteroaryl(C<sub>1</sub>-C<sub>6</sub>)alkyl, heteroaryl(C<sub>2</sub>-C<sub>6</sub>)alkenyl, hydroxy-(C<sub>1</sub>-C<sub>6</sub>)alkyl, (C<sub>1</sub>-C<sub>6</sub>)alkoxy(C<sub>1</sub>-C<sub>6</sub>)alkyl, amino-(C<sub>1</sub>-C<sub>6</sub>)alkyl, aryl and thio(C<sub>1</sub>-C<sub>6</sub>)alkyl; or R<sup>1</sup> and R<sup>2</sup> together

5 C<sub>6</sub>)alkenyl, heteroaryl(C<sub>1</sub>-C<sub>6</sub>)alkyl, heteroaryl(C<sub>2</sub>-C<sub>6</sub>)alkenyl, hydroxy(C<sub>1</sub>-C<sub>6</sub>)alkyl, amino(C<sub>1</sub>-C<sub>6</sub>)alkyl, aryl, thio(C<sub>1</sub>-C<sub>6</sub>)alkyl, (C<sub>1</sub>-C<sub>6</sub>)alkoxy(C<sub>1</sub>-C<sub>6</sub>)alkyl or (C<sub>1</sub>-C<sub>6</sub>)alkylamino(C<sub>1</sub>-C<sub>6</sub>)alkyl;  
R<sup>34</sup> is (H, R<sup>3</sup>), (H, R<sup>43</sup>), =O or =NOR<sup>17</sup> when the optional double bond adjacent to R<sup>34</sup> is absent; R<sup>34</sup> is R<sup>44</sup> when the double bond is present;

10 Het is a mono-, bi- or tricyclic heteroaromatic group of 5 to 14 atoms comprised of 1 to 13 carbon atoms and 1 to 4 heteroatoms independently selected from the group consisting of N, O and S, wherein a ring nitrogen can form an N-oxide or a quaternary group with a C<sub>1</sub>-C<sub>4</sub> alkyl group, wherein Het is attached to B by a carbon atom ring member of Het, and wherein the Het group is substituted by

15 1 to 4 moieties, W, independently selected from the group consisting of H; C<sub>1</sub>-C<sub>6</sub> alkyl; fluoro(C<sub>1</sub>-C<sub>6</sub>)alkyl; difluoro(C<sub>1</sub>-C<sub>6</sub>)alkyl; trifluoro-(C<sub>1</sub>-C<sub>6</sub>)-alkyl; C<sub>3</sub>-C<sub>7</sub> cycloalkyl; heterocycloalkyl; heterocycloalkyl substituted by C<sub>1</sub>-C<sub>6</sub> alkyl, C<sub>2</sub>-C<sub>6</sub> alkenyl, OH-(C<sub>1</sub>-C<sub>6</sub>)alkyl, or =O; C<sub>2</sub>-C<sub>6</sub> alkenyl; R<sup>21</sup>-aryl(C<sub>1</sub>-C<sub>6</sub>)alkyl; R<sup>21</sup>-aryl-(C<sub>2</sub>-C<sub>6</sub>)-alkenyl; R<sup>21</sup>-aryloxy; R<sup>21</sup>-aryl-NH-; heteroaryl(C<sub>1</sub>-C<sub>6</sub>)alkyl; heteroaryl(C<sub>2</sub>-

20 C<sub>6</sub>)-alkenyl; heteroaryloxy; heteroaryl-NH-; hydroxy(C<sub>1</sub>-C<sub>6</sub>)alkyl; dihydroxy(C<sub>1</sub>-C<sub>6</sub>)alkyl; amino(C<sub>1</sub>-C<sub>6</sub>)alkyl; (C<sub>1</sub>-C<sub>6</sub>)alkylamino-(C<sub>1</sub>-C<sub>6</sub>)alkyl; di-((C<sub>1</sub>-C<sub>6</sub>)alkyl)-amino(C<sub>1</sub>-C<sub>6</sub>)alkyl; thio(C<sub>1</sub>-C<sub>6</sub>)alkyl; C<sub>1</sub>-C<sub>6</sub> alkoxy; C<sub>2</sub>-C<sub>6</sub> alkenyloxy; halogen; -NR<sup>4</sup>R<sup>5</sup>; -CN; -OH; -COOR<sup>17</sup>; -COR<sup>16</sup>; -OSO<sub>2</sub>CF<sub>3</sub>; -CH<sub>2</sub>OCH<sub>2</sub>CF<sub>3</sub>; (C<sub>1</sub>-C<sub>6</sub>)alkylthio; -C(O)NR<sup>4</sup>R<sup>5</sup>; -OCHR<sup>6</sup>-phenyl; phenoxy-(C<sub>1</sub>-C<sub>6</sub>)alkyl; -NHCOR<sup>16</sup>; -

25 NHSO<sub>2</sub>R<sup>16</sup>; biphenyl; -OC(R<sup>6</sup>)<sub>2</sub>COOR<sup>7</sup>; -OC(R<sup>6</sup>)<sub>2</sub>C(O)NR<sup>4</sup>R<sup>5</sup>; (C<sub>1</sub>-C<sub>6</sub>)alkoxy; -C(=NOR<sup>17</sup>)R<sup>18</sup>; C<sub>1</sub>-C<sub>6</sub> alkoxy substituted by (C<sub>1</sub>-C<sub>6</sub>)alkyl, amino, -OH, COOR<sup>17</sup>, -NHCOOR<sup>17</sup>, -CONR<sup>4</sup>R<sup>5</sup>, aryl, aryl substituted by 1 to 3 moieties independently selected from the group consisting of halogen, -CF<sub>3</sub>, C<sub>1</sub>-C<sub>6</sub> alkyl, C<sub>1</sub>-C<sub>6</sub> alkoxy and -COOR<sup>17</sup>, aryl wherein adjacent carbons form a ring with a methylenedioxy group, -C(O)NR<sup>4</sup>R<sup>5</sup> or heteroaryl; R<sup>21</sup>-aryl; aryl wherein adjacent carbons form a ring with a methylenedioxy group; R<sup>41</sup>-heteroaryl; and heteroaryl wherein adjacent carbon atoms form a ring with a C<sub>3</sub>-C<sub>5</sub> alkylene group or a methylenedioxy group;

5        R<sup>4</sup> and R<sup>5</sup> are independently selected from the group consisting of H, C1-C6 alkyl, phenyl, benzyl and C3-C7 cycloalkyl, or R<sup>4</sup> and R<sup>5</sup> together are -(CH<sub>2</sub>)<sub>4</sub>-, -(CH<sub>2</sub>)<sub>5</sub>- or -(CH<sub>2</sub>)<sub>2</sub>NR<sup>7</sup>-(CH<sub>2</sub>)<sub>2</sub>- and form a ring with the nitrogen to which they are attached;

10      R<sup>6</sup> is independently selected from the group consisting of H, C1-C6 alkyl, phenyl, (C<sub>3</sub>-C<sub>7</sub>)cycloalkyl, (C<sub>3</sub>-C<sub>7</sub>)cycloalkyl(C<sub>1</sub>-C<sub>6</sub>)alkyl, (C<sub>1</sub>-C<sub>6</sub>)alkoxy(C<sub>1</sub>-C<sub>6</sub>)alkyl, hydroxy(C<sub>1</sub>-C<sub>6</sub>)alkyl and amino(C<sub>1</sub>-C<sub>6</sub>)alkyl;

R<sup>7</sup> is H or (C<sub>1</sub>-C<sub>6</sub>)alkyl;

15      R<sup>8</sup>, R<sup>10</sup> and R<sup>11</sup> are independently selected from the group consisting of R<sup>1</sup> and -OR<sup>1</sup>, provided that when the optional double bond is present, R<sup>10</sup> is absent;

R<sup>9</sup> is H, OH, C<sub>1</sub>-C<sub>6</sub> alkoxy, halogen or halo(C<sub>1</sub>-C<sub>6</sub>)alkyl;

B is -(CH<sub>2</sub>)<sub>n3</sub>-, -CH<sub>2</sub>-O-, -CH<sub>2</sub>S-, -CH<sub>2</sub>-NR<sup>6</sup>-, -C(O)NR<sup>6</sup>-, -NR<sup>6</sup>C(O)-,

 , cis or trans -(CH<sub>2</sub>)<sub>n4</sub>CR<sup>12</sup>=CR<sup>12a</sup>(CH<sub>2</sub>)<sub>n5</sub>- or -(CH<sub>2</sub>)<sub>n4</sub>C≡C(CH<sub>2</sub>)<sub>n5</sub>- ,

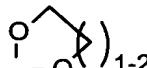
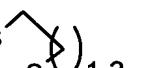
wherein n<sub>3</sub> is 0-5, n<sub>4</sub> and n<sub>5</sub> are independently 0-2, and R<sup>12</sup> and R<sup>12a</sup> are

20      independently selected from the group consisting of H, C<sub>1</sub>-C<sub>6</sub> alkyl and halogen;

X is -O- or -NR<sup>6</sup>- when the double dotted lines adjacent to X represent a single bond, or X is H, -OH or -NHR<sup>20</sup> when the bond is absent;

25      Y is =O, =S, (H, H), (H, OH) or (H, C<sub>1</sub>-C<sub>6</sub> alkoxy) when the double dotted lines adjacent to X represent a single bond, or when the bond is absent, Y is =O, =NOR<sup>17</sup>, (H, H), (H, OH), (H, SH), (H, C<sub>1</sub>-C<sub>6</sub> alkoxy) or (H, -NHR<sup>45</sup>);

R<sup>15</sup> is absent when the double dotted lines adjacent to X represent a single bond; R<sup>15</sup> is H, C<sub>1</sub>-C<sub>6</sub> alkyl, -NR<sup>18</sup>R<sup>19</sup> or -OR<sup>17</sup> when said single bond is absent;

or Y is  )<sub>1-2</sub> or  )<sub>1-2</sub> and R<sup>15</sup> is H or C<sub>1</sub>-C<sub>6</sub> alkyl;

R<sup>16</sup> is C<sub>1</sub>-C<sub>6</sub> lower alkyl, phenyl or benzyl;

5 R<sup>17</sup>, R<sup>18</sup> and R<sup>19</sup> are independently selected from the group consisting of H, C<sub>1</sub>-C<sub>6</sub> alkyl, phenyl, benzyl;

R<sup>20</sup> is H, C<sub>1</sub>-C<sub>6</sub> alkyl, phenyl, benzyl, -C(O)R<sup>6</sup> or -SO<sub>2</sub>R<sup>6</sup>;

R<sup>21</sup> is 1 to 3 moieties independently selected from the group consisting of hydrogen, -CN, -CF<sub>3</sub>, -OCF<sub>3</sub>, halogen, -NO<sub>2</sub>, C<sub>1</sub>-C<sub>6</sub> alkyl, C<sub>1</sub>-C<sub>6</sub>alkoxy,

10 (C<sub>1</sub>-C<sub>6</sub>)alkylamino, di-((C<sub>1</sub>-C<sub>6</sub>)alkyl)amino, amino(C<sub>1</sub>-C<sub>6</sub>)alkyl, (C<sub>1</sub>-C<sub>6</sub>)-alkylamino(C<sub>1</sub>-C<sub>6</sub>)alkyl, di-((C<sub>1</sub>-C<sub>6</sub>)alkyl)-amino(C<sub>1</sub>-C<sub>6</sub>)alkyl, hydroxy-(C<sub>1</sub>-C<sub>6</sub>)alkyl, -COOR<sup>17</sup>, -COR<sup>17</sup>, -NHCOR<sup>16</sup>, -NHSO<sub>2</sub>R<sup>16</sup>, -NHSO<sub>2</sub>CH<sub>2</sub>CF<sub>3</sub>, heteroaryl or -C(=NOR<sup>17</sup>)R<sup>18</sup>;

15 R<sup>22</sup> and R<sup>23</sup> are independently selected from the group consisting of hydrogen, R<sup>24</sup>-(C<sub>1</sub>-C<sub>10</sub>)alkyl, R<sup>24</sup>-(C<sub>2</sub>-C<sub>10</sub>)alkenyl, R<sup>24</sup>-(C<sub>2</sub>-C<sub>10</sub>)alkynyl, R<sup>27</sup>-hetero-cycloalkyl, R<sup>25</sup>-aryl, R<sup>25</sup>-aryl(C<sub>1</sub>-C<sub>6</sub>)alkyl, R<sup>29</sup>-(C<sub>3</sub>-C<sub>7</sub>)cycloalkyl, R<sup>29</sup>-(C<sub>3</sub>-C<sub>7</sub>)cycloalkenyl, -OH, -OC(O)R<sup>30</sup>, -C(O)OR<sup>30</sup>, -C(O)R<sup>30</sup>, -C(O)NR<sup>30</sup>R<sup>31</sup>, -NR<sup>30</sup>R<sup>31</sup>, -NR<sup>30</sup>C(O)R<sup>31</sup>, -NR<sup>30</sup>C(O)NR<sup>31</sup>R<sup>32</sup>, -NHSO<sub>2</sub>R<sup>30</sup>, -OC(O)NR<sup>30</sup>R<sup>31</sup>,

20 R<sup>24</sup>-(C<sub>1</sub>-C<sub>10</sub>)alkoxy, R<sup>24</sup>-(C<sub>2</sub>-C<sub>10</sub>)-alkenyloxy, R<sup>24</sup>-(C<sub>2</sub>-C<sub>10</sub>)alkynyloxy, R<sup>27</sup>-heterocycloalkyloxy, R<sup>29</sup>-(C<sub>3</sub>-C<sub>7</sub>)cycloalkyloxy, R<sup>29</sup>-(C<sub>3</sub>-C<sub>7</sub>)cyclo-alkenyloxy, R<sup>29</sup>-(C<sub>3</sub>-C<sub>7</sub>)cycloalkyl-NH-, -CH<sub>2</sub>-O-CH<sub>2</sub>-phenyl, -NHSO<sub>2</sub>NHR<sup>16</sup> and -CH(=NOR<sup>17</sup>);

25 or R<sup>22</sup> and R<sup>10</sup> together with the carbon to which they are attached, or R<sup>23</sup> and R<sup>11</sup> together with the carbon to which they are attached, independently form a R<sup>42</sup>-substituted carbocyclic ring of 3-10 atoms, or a R<sup>42</sup>-substituted heterocyclic ring of 4-10 atoms wherein 1-3 ring members are independently selected from the group consisting of -O-, -NH- and -SO<sub>2</sub>-<sub>2</sub>, provided that when R<sup>22</sup> and R<sup>10</sup> form a ring, the optional double bond is absent;

30 R<sup>24</sup> is 1, 2 or 3 moieties independently selected from the group consisting of hydrogen, halogen, -OH, (C<sub>1</sub>-C<sub>6</sub>)alkoxy, R<sup>35</sup>-aryl, (C<sub>1</sub>-C<sub>10</sub>)-alkyl-C(O)-, (C<sub>2</sub>-C<sub>10</sub>)-alkenyl-C(O)-, (C<sub>2</sub>-C<sub>10</sub>)alkynyl-C(O)-, heterocycloalkyl, R<sup>26</sup>-(C<sub>3</sub>-C<sub>7</sub>)cycloalkyl, R<sup>26</sup>-(C<sub>3</sub>-C<sub>7</sub>)cycloalkenyl, -OC(O)R<sup>30</sup>, -C(O)OR<sup>30</sup>, -C(O)R<sup>30</sup>, -C(O)NR<sup>30</sup>R<sup>31</sup>, -NR<sup>30</sup>R<sup>31</sup>, -NR<sup>30</sup>C(O)R<sup>31</sup>, -NR<sup>30</sup>C(O)NR<sup>31</sup>R<sup>32</sup>, -NHSO<sub>2</sub>R<sup>30</sup>, -OC(O)NR<sup>30</sup>R<sup>31</sup>, R<sup>24</sup>-(C<sub>2</sub>-C<sub>10</sub>)-alkenyloxy, R<sup>24</sup>-(C<sub>2</sub>-C<sub>10</sub>)alkynyloxy, R<sup>27</sup>-heterocycloalkyloxy, R<sup>29</sup>-(C<sub>3</sub>-C<sub>7</sub>)-cycloalkyloxy, R<sup>29</sup>-(C<sub>3</sub>-C<sub>7</sub>)cyclo-alkenyloxy, R<sup>29</sup>-(C<sub>3</sub>-C<sub>7</sub>)cycloalkyl-NH-, -NHSO<sub>2</sub>NHR<sup>16</sup> and -CH(=NOR<sup>17</sup>);

5         $R^{25}$  is 1, 2 or 3 moieties independently selected from the group consisting of hydrogen, heterocycloalkyl, halogen,  $-COOR^{36}$ ,  $-CN$ ,  $-C(O)NR^{37}R^{38}$ ,  $-NR^{39}C(O)R^{40}$ ,  $-OR^{36}$ ,  $(C_3-C_7)cycloalkyl$ ,  $(C_3-C_7)cycloalkyl-C_1-C_6)alkyl$ ,  $(C_1-C_6)alkyl(C_3-C_7)cycloalkyl-(C_1-C_6)alkyl$ ,  $halo(C_1-C_6)alkyl(C_3-C_7)cycloalkyl(C_1-C_6)alkyl$ ,  $hydroxy(C_1-C_6)alkyl$ ,

10       $(C_1-C_6)alkoxy(C_1-C_6)alkyl$ , and  $R^{41}$ -heteroaryl; or two  $R^{25}$  groups on adjacent ring carbons form a fused methylenedioxy group;

$R^{26}$  is 1, 2, or 3 moieties independently selected from the group consisting of hydrogen, halogen and  $(C_1-C_6)alkoxy$ ;

$R^{27}$  is 1, 2 or 3 moieties independently selected from the group consisting of hydrogen,  $R^{28}-(C_1-C_{10})alkyl$ ,  $R^{28}-(C_2-C_{10})alkenyl$ ,  $R^{28}-(C_2-C_{10})alkynyl$ ;

15       $R^{28}$  is hydrogen,  $-OH$  or  $(C_1-C_6)alkoxy$ ;

$R^{29}$  is 1, 2 or 3 moieties independently selected from the group consisting of hydrogen,  $(C_1-C_6)alkyl$ ,  $-OH$ ,  $(C_1-C_6)alkoxy$  and halogen;

$R^{30}$ ,  $R^{31}$  and  $R^{32}$  are independently selected from the group consisting of hydrogen,  $(C_1-C_{10})-alkyl$ ,  $(C_1-C_6)alkoxy(C_1-C_{10})-alkyl$ ,  $R^{25}$ -aryl( $C_1-C_6$ )-alkyl,  $R^{33}-(C_3-C_7)cycloalkyl$ ,  $R^{34}-(C_3-C_7)cycloalkyl(C_1-C_6)alkyl$ ,  $R^{25}$ -aryl, heterocycloalkyl, heteroaryl, heterocycloalkyl( $C_1-C_6$ )alkyl and heteroaryl( $C_1-C_6$ )alkyl;

$R^{33}$  is hydrogen,  $(C_1-C_6)alkyl$ ,  $OH-(C_1-C_6)alkyl$  or  $(C_1-C_6)alkoxy$ ;

$R^{35}$  is 1 to 4 moieties independently selected from the group consisting of hydrogen,  $(C_1-C_6)alkyl$ ,  $-OH$ , halogen,  $-CN$ ,  $(C_1-C_6)alkoxy$ , trihalo( $C_1-C_6$ )alkoxy,  $(C_1-C_6)alkylamino$ , di( $(C_1-C_6)alkyl$ )amino,  $-OCF_3$ ,  $OH-(C_1-C_6)alkyl$ ,  $-CHO$ ,  $-C(O)(C_1-C_6)-alkylamino$ ,  $-C(O)di((C_1-C_6)alkyl)amino$ ,  $-NH_2$ ,  $-NHC(O)(C_1-C_6)alkyl$  and  $-N((C_1-C_6)alkyl)C(O)(C_1-C_6)alkyl$ ;

20       $R^{36}$  is hydrogen,  $(C_1-C_6)alkyl$ ,  $halo(C_1-C_6)alkyl$ , dihalo( $C_1-C_6$ )alkyl or trifluoro( $C_1-C_6$ )alkyl;

$R^{37}$  and  $R^{38}$  are independently selected from the group consisting of hydrogen,  $(C_1-C_6)alkyl$ ,  $aryl(C_1-C_6)alkyl$ , phenyl and  $(C_3-C_{15})cycloalkyl$ , or  $R^{37}$  and  $R^{38}$  together are  $-(CH_2)_4-$ ,  $-(CH_2)_5-$  or  $-(CH_2)_2-NR^{39}-(CH_2)_2-$  and form a ring with the nitrogen to which they are attached;

25       $R^{39}$  and  $R^{40}$  are independently selected from the group consisting of hydrogen,  $(C_1-C_6)alkyl$ ,  $aryl(C_1-C_6)alkyl$ , phenyl and  $(C_3-C_{15})-cycloalkyl$ , or  $R^{39}$  and

5      R<sup>40</sup> in the group -NR<sup>39</sup>C(O)R<sup>40</sup>, together with the carbon and nitrogen atoms to which they are attached, form a cyclic lactam having 5-8 ring members;

10     R<sup>41</sup> is 1 to 4 moieties independently selected from the group consisting of hydrogen, (C<sub>1</sub>-C<sub>6</sub>)alkyl, (C<sub>1</sub>-C<sub>6</sub>)alkoxy, (C<sub>1</sub>-C<sub>6</sub>)alkylamino, di((C<sub>1</sub>-C<sub>6</sub>)alkyl)amino, -OCF<sub>3</sub>, OH-(C<sub>1</sub>-C<sub>6</sub>)alkyl, -CHO and phenyl;

15     R<sup>42</sup> is 1 to 3 moieties independently selected from the group consisting of hydrogen, -OH, (C<sub>1</sub>-C<sub>6</sub>)alkyl and (C<sub>1</sub>-C<sub>6</sub>)alkoxy;

20     R<sup>43</sup> is -NR<sup>30</sup>R<sup>31</sup>, -NR<sup>30</sup>C(O)R<sup>31</sup>, -NR<sup>30</sup>C(O)NR<sup>31</sup>R<sup>32</sup>, -NHSO<sub>2</sub>R<sup>30</sup> or -NHCOOR<sup>17</sup>;

25     R<sup>44</sup> is H, C<sub>1</sub>-C<sub>6</sub> alkoxy, -SOR<sup>16</sup>, -SO<sub>2</sub>R<sup>17</sup>, -C(O)OR<sup>17</sup>, -C(O)NR<sup>18</sup>R<sup>19</sup>, C<sub>1</sub>-C<sub>6</sub> alkyl, halogen, fluoro(C<sub>1</sub>-C<sub>6</sub>)alkyl, difluoro(C<sub>1</sub>-C<sub>6</sub>)alkyl, trifluoro(C<sub>1</sub>-C<sub>6</sub>)alkyl, C<sub>3</sub>-C<sub>7</sub> cycloalkyl, C<sub>2</sub>-C<sub>6</sub> alkenyl, aryl(C<sub>1</sub>-C<sub>6</sub>)alkyl, aryl(C<sub>2</sub>-C<sub>6</sub>)alkenyl, heteroaryl(C<sub>1</sub>-C<sub>6</sub>)alkyl, heteroaryl(C<sub>2</sub>-C<sub>6</sub>)alkenyl, hydroxy(C<sub>1</sub>-C<sub>6</sub>)alkyl, amino(C<sub>1</sub>-C<sub>6</sub>)alkyl, aryl, thio(C<sub>1</sub>-C<sub>6</sub>)alkyl, (C<sub>1</sub>-C<sub>6</sub>)alkoxy(C<sub>1</sub>-C<sub>6</sub>)alkyl or (C<sub>1</sub>-C<sub>6</sub>)alkylamino(C<sub>1</sub>-C<sub>6</sub>)alkyl; and

30     R<sup>45</sup> is H, C<sub>1</sub>-C<sub>6</sub> alkyl, -COOR<sup>16</sup> or -SO<sub>2</sub>,

35     wherein said therapeutic condition is a cardiovascular or circulatory disease or condition, an inflammatory disease or condition, a respiratory tract disease or condition, cancer, acute renal failure, glomerulonephritis, astrogliosis, a fibrotic disorder of the liver, kidney, lung or intestinal tract, Alzheimer's disease, diabetes, diabetic neuropathy, rheumatoid arthritis, neurodegenerative disease, neurotoxic disease, systemic lupus erythematosus, multiple sclerosis, osteoporosis, glaucoma, macular degeneration, psoriasis, radiation fibrosis, endothelial dysfunction, a wound or a spinal cord injury, or a symptom or result thereof.

2.     The method of claim 1 wherein the cardiovascular or circulatory disease or condition is atherosclerosis, restenosis, hypertension, acute coronary syndrome, angina pectoris, arrhythmia, heart disease, heart failure, myocardial infarction, thrombotic or thromboembolic stroke, a peripheral vascular disease, deep vein thrombosis, venous thromboembolism, a cardiovascular disease associated with hormone replacement therapy, disseminated intravascular coagulation syndrome, renal ischemia, cerebral

5        stroke, cerebral ischemia, cerebral infarction, migraine, renal vascular homeostasis or erectile dysfunction.

10      3. The method of claim 1 wherein the inflammatory disease or condition is irritable bowel syndrome, Crohn's disease, nephritis or a radiation- or chemotherapy- induced proliferative or inflammatory disorder of the gastrointestinal tract, lung, urinary bladder, gastrointestinal tract or other organ.

15      4. The method of claim 1 wherein the respiratory tract disease or condition is reversible airway obstruction, asthma, chronic asthma, bronchitis or chronic airways disease.

20      5. The method of claim 1 wherein the cancer is renal cell carcinoma or an angiogenesis related disorder.

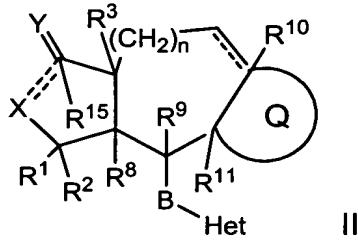
25      6. The method of claim 1 wherein the neurodegenerative disease is Parkinson's disease, amyotrophic lateral sclerosis, Alzheimer's disease, Huntington's disease or Wilson's disease.

30      7. The method of claim 1 further comprising administering at least one therapeutically effective agent useful in the treatment of inflammation, rheumatism, asthma, glomerulonephritis, osteoporosis, neuropathy and/or malignant tumors, angiogenesis related disorders, cancer, disorders of the liver, kidney or lung, melanoma, renal cell carcinoma, renal disease, acute renal failure, chronic renal failure, renal vascular homeostasis, glomerulonephritis, chronic airways disease, bladder inflammation, neurodegenerative and/or neurotoxic diseases, conditions, or injuries, radiation fibrosis, endothelial dysfunction, periodontal diseases or wounds.

35      8. The method of claim 7 further comprising administering at least two therapeutically effective agents.

5

9. A method of treating a therapeutic condition comprising administering to a mammal in need of such treatment an effective amount of at least one compound of the formula:



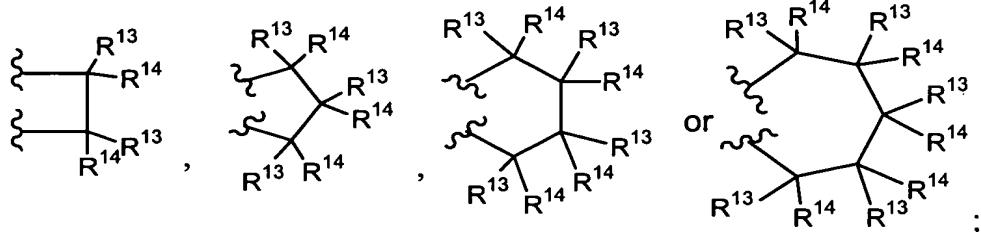
10 or a pharmaceutically acceptable isomer, salt, solvate or co-crystal form thereof, wherein:

the double dotted lines adjacent to X :::::: together represent an optional single bond;

15 the single dotted line adjacent to R<sup>10</sup> ----- represents an optional double bond;

n is 0-2;

Q is



R<sup>1</sup> and R<sup>2</sup> are independently selected from the group consisting of H,

20 (C<sub>1</sub>-C<sub>6</sub>)alkyl, fluoro(C<sub>1</sub>-C<sub>6</sub>)alkyl-, difluoro(C<sub>1</sub>-C<sub>6</sub>)alkyl-, trifluoro-(C<sub>1</sub>-C<sub>6</sub>)alkyl-, (C<sub>3</sub>-C<sub>6</sub>)cycloalkyl, (C<sub>2</sub>-C<sub>6</sub>)alkenyl, hydroxy-(C<sub>1</sub>-C<sub>6</sub>)alkyl-, and amino(C<sub>1</sub>-C<sub>6</sub>)alkyl-;

R<sup>3</sup> is H, hydroxy, (C<sub>1</sub>-C<sub>6</sub>)alkoxy, -SOR<sup>16</sup>, -SO<sub>2</sub>R<sup>17</sup>, -C(O)OR<sup>17</sup>,

-C(O)NR<sup>18</sup>R<sup>19</sup>, -(C<sub>1</sub>-C<sub>6</sub>)alkyl-C(O)NR<sup>18</sup>R<sup>19</sup>, (C<sub>1</sub>-C<sub>6</sub>)alkyl, halogen,

fluoro(C<sub>1</sub>-C<sub>6</sub>)alkyl-, difluoro(C<sub>1</sub>-C<sub>6</sub>)alkyl-, trifluoro(C<sub>1</sub>-C<sub>6</sub>)alkyl-, (C<sub>3</sub>-C<sub>6</sub>)cycloalkyl,

25 (C<sub>3</sub>-C<sub>6</sub>)-cycloalkyl-(C<sub>1</sub>-C<sub>6</sub>)alkyl-, (C<sub>2</sub>-C<sub>6</sub>)alkenyl, aryl(C<sub>1</sub>-C<sub>6</sub>)alkyl-,

aryl(C<sub>2</sub>-C<sub>6</sub>)alkenyl-, heteroaryl(C<sub>1</sub>-C<sub>6</sub>)alkyl-, heteroaryl(C<sub>2</sub>-C<sub>6</sub>)alkenyl-,

hydroxy(C<sub>1</sub>-C<sub>6</sub>)-alkyl-, -NR<sup>22</sup>R<sup>23</sup>, NR<sup>22</sup>R<sup>23</sup>-(C<sub>1</sub>-C<sub>6</sub>)alkyl-, aryl, thio(C<sub>1</sub>-C<sub>6</sub>)alkyl-,

5     $(C_1-C_6)alkyl-thio(C_1-C_6)alkyl$ -,  $(C_1-C_6)alkoxy(C_1-C_6)alkyl$ -,  
     $NR^{18}R^{19}-C(O)-(C_1-C_6)alkyl$ - or  $(C_3-C_6)cycloalkyl-(C_1-C_6)alkyl$ -;  
        Het is a mono- or bi-cyclic heteroaryl group of 5 to 10 atoms comprised of 1  
        to 9 carbon atoms and 1 to 4 heteroatoms independently selected from the group  
        consisting of N, O and S, wherein a ring nitrogen can form an N-oxide or a  
10    quaternary group with a  $(C_1-C_4)alkyl$  group, wherein Het is attached to B by a  
        carbon atom ring member of said Het, and wherein the Het group is substituted by  
        W;  
            W is 1 to 4 moieties independently selected from the group consisting of H,  
         $(C_1-C_6)alkyl$ , fluoro $(C_1-C_6)alkyl$ -, difluoro $(C_1-C_6)alkyl$ -, trifluoro $(C_1-C_6)alkyl$ -,  
15     $(C_3-C_6)cycloalkyl$ , hydroxy $(C_1-C_6)alkyl$ -, dihydroxy $(C_1-C_6)alkyl$ -,  
         $NR^{25}R^{26}(C_1-C_6)alkyl$ -, thio $(C_1-C_6)alkyl$ -, -OH,  $(C_1-C_6)alkoxy$ , halogen,  $-NR^4R^5$ ,  
        - $C(O)OR^{17}$ , - $COR^{16}$ ,  $(C_1-C_6)alkylthio$ -,  $R^{21-}aryl$ ,  $R^{21-}aryl(C_1-C_6)alkyl$ -, aryl wherein  
        adjacent ring carbons in said aryl, along with two O atoms, form a methylenedioxy  
        group, and  $R^{21-}heteroaryl$ ;  
20     $R^4$  and  $R^5$  are independently selected from the group consisting of H,  
         $(C_1-C_6)alkyl$ , phenyl, benzyl and  $(C_3-C_6)cycloalkyl$ , or  $R^4$  and  $R^5$  taken together are  
         $-(CH_2)_4$ -,  $-(CH_2)_5$ - or  $-(CH_2)_2NR^7-(CH_2)_2$ - and form a ring with the nitrogen to  
        which they are attached;  
             $R^6$  is H,  $(C_1-C_6)alkyl$  or phenyl;  
25     $R^7$  is H,  $(C_1-C_6)alkyl$ ,  $-C(O)-R^{16}$ ,  $-C(O)OR^{17}$  or  $-S(O)_2R^{17}$ ;  
             $R^8$ ,  $R^{10}$  and  $R^{11}$  are independently selected from the group consisting of  $R^1$   
        and  $-OR^1$ , provided that when the optional double bond shown in Formula II is  
        present,  $R^{10}$  is absent;  
             $R^9$  is H, OH or  $(C_1-C_6)alkoxy$ ;  
30    B is  $-(CH_2)_{n_3}$ -, cis or trans  $-(CH_2)_{n_4}CR^{12}=CR^{12a}(CH_2)_{n_5}$ - or  
         $-(CH_2)_{n_4}C\equiv C(CH_2)_{n_5}$ -, wherein  $n_3$  is 0-5,  $n_4$  and  $n_5$  are independently 0-2, and  $R^{12}$   
        and  $R^{12a}$  are independently selected from the group consisting of H,  $(C_1-C_6)alkyl$   
        and halogen;  
            X is  $-O-$  or  $-NR^6-$  when the dotted line shown adjacent to X in Formula II  
35    represents a single bond, or X is -OH or  $-NHR^{20}$  when the bond is absent;

5        Y is =O, =S, (H, H), (H, OH) or (H, (C<sub>1</sub>-C<sub>6</sub>)alkoxy) when the dotted line shown adjacent to X in Formula II represents a single bond, or when the bond is absent, Y is =O, (H, H), (H, OH), (H, SH) or (H, (C<sub>1</sub>-C<sub>6</sub>)alkoxy);  
each R<sup>13</sup> is independently selected from H, (C<sub>1</sub>-C<sub>6</sub>)alkyl, (C<sub>3</sub>-C<sub>8</sub>)cycloalkyl, -(CH<sub>2</sub>)<sub>n6</sub>NHC(O)OR<sup>16b</sup>, -(CH<sub>2</sub>)<sub>n6</sub>NHC(O)R<sup>16b</sup>, -(CH<sub>2</sub>)<sub>n6</sub>NHC(O)NR<sup>4</sup>R<sup>5</sup>,  
-(CH<sub>2</sub>)<sub>n6</sub>NHSO<sub>2</sub>R<sup>16</sup>, -(CH<sub>2</sub>)<sub>n6</sub>NHSO<sub>2</sub>NR<sup>4</sup>R<sup>5</sup>, and -(CH<sub>2</sub>)<sub>n6</sub>C(O)NR<sup>28</sup>R<sup>29</sup> where  
n<sub>6</sub> is 0-4, haloalkyl, and halogen;

10      each R<sup>14</sup> is independently selected from H, (C<sub>1</sub>-C<sub>6</sub>)alkyl, -OH, (C<sub>1</sub>-C<sub>6</sub>)alkoxy, R<sup>27</sup>-aryl(C<sub>1</sub>-C<sub>6</sub>)alkyl, heteroaryl, heteroarylalkyl, heterocyclyl, heterocyclylalkyl, -(CH<sub>2</sub>)<sub>n6</sub>NHC(O)OR<sup>16b</sup>, -(CH<sub>2</sub>)<sub>n6</sub>NHC(O)R<sup>16b</sup>,  
-(CH<sub>2</sub>)<sub>n6</sub>NHC(O)NR<sup>4</sup>R<sup>5</sup>, -(CH<sub>2</sub>)<sub>n6</sub>NHSO<sub>2</sub>R<sup>16</sup>, -(CH<sub>2</sub>)<sub>n6</sub>NHSO<sub>2</sub>NR<sup>4</sup>R<sup>5</sup>, and  
15      -(CH<sub>2</sub>)<sub>n6</sub>C(O)NR<sup>28</sup>R<sup>29</sup> where n<sub>6</sub> is 0-4, halogen and haloalkyl; or  
R<sup>13</sup> and R<sup>14</sup> taken together form a spirocyclic or a heterospirocyclic ring of 3-6 atoms;  
wherein at least one of R<sup>13</sup> or R<sup>14</sup> is selected from the group consisting of  
20      -(CH<sub>2</sub>)<sub>n6</sub>NHC(O)OR<sup>16b</sup>, -(CH<sub>2</sub>)<sub>n6</sub>NHC(O)R<sup>16b</sup>, -(CH<sub>2</sub>)<sub>n6</sub>NHC(O)NR<sup>4</sup>R<sup>5</sup>,  
-(CH<sub>2</sub>)<sub>n6</sub>NHSO<sub>2</sub>R<sup>16</sup>, -(CH<sub>2</sub>)<sub>n6</sub>NHSO<sub>2</sub>NR<sup>4</sup>R<sup>5</sup>, and -(CH<sub>2</sub>)<sub>n6</sub>C(O)NR<sup>28</sup>R<sup>29</sup> where  
n<sub>6</sub> is 0-4;

25      R<sup>15</sup> is H when the double dotted line shown adjacent to X in Formula II represents a single bond and is H, (C<sub>1</sub>-C<sub>6</sub>)alkyl, -NR<sup>18</sup>R<sup>19</sup>, or -OR<sup>17</sup> when said bond is absent;

R<sup>16</sup> is independently selected from the group consisting of (C<sub>1</sub>-C<sub>6</sub>)alkyl, phenyl and benzyl;

30      R<sup>16b</sup> is H, alkoxy, (C<sub>1</sub>-C<sub>6</sub>)alkyl, (C<sub>1</sub>-C<sub>6</sub>)alkoxy(C<sub>1</sub>-C<sub>6</sub>)alkyl-, R<sup>22</sup>-O-C(O)-(C<sub>1</sub>-C<sub>6</sub>)alkyl-, (C<sub>3</sub>-C<sub>6</sub>)cycloalkyl, R<sup>21</sup>-aryl, R<sup>21</sup>-aryl(C<sub>1</sub>-C<sub>6</sub>)alkyl, haloalkyl, alkenyl, halosubstituted alkenyl, alkynyl, halosubstituted alkynyl, R<sup>21</sup>-heteroaryl, R<sup>21</sup>-(C<sub>1</sub>-C<sub>6</sub>)alkyl heteroaryl, R<sup>21</sup>-(C<sub>1</sub>-C<sub>6</sub>)alkyl heterocycloalkyl, R<sup>28</sup>R<sup>29</sup>N-(C<sub>1</sub>-C<sub>6</sub>)alkyl, R<sup>28</sup>R<sup>29</sup>N-(CO)-(C<sub>1</sub>-C<sub>6</sub>)alkyl, R<sup>28</sup>R<sup>29</sup>N-(CO)O-(C<sub>1</sub>-C<sub>6</sub>)alkyl, R<sup>28</sup>O(CO)N(R<sup>29</sup>)-(C<sub>1</sub>-C<sub>6</sub>)alkyl, R<sup>28</sup>S(O)<sub>2</sub>N(R<sup>29</sup>)-(C<sub>1</sub>-C<sub>6</sub>)alkyl, R<sup>28</sup>R<sup>29</sup>N-(CO)-N(R<sup>29</sup>)-(C<sub>1</sub>-C<sub>6</sub>)alkyl, R<sup>28</sup>R<sup>29</sup>N-S(O)2N(R<sup>29</sup>)-(C<sub>1</sub>-C<sub>6</sub>)alkyl,

5       $R^{28}-(CO)N(R^{29})-(C_1-C_6)\text{alkyl}$ ,  $R^{28}R^{29}N-S(O)_2-(C_1-C_6)\text{alkyl}$ ,  $HOS(O)_2-(C_1-C_6)\text{alkyl}$ ,  
 $(OH)_2P(O)_2-(C_1-C_6)\text{alkyl}$ ,  $R^{28}-S-(C_1-C_6)\text{alkyl}$ ,  
 $R^{28}-S(O)_2-(C_1-C_6)\text{alkyl}$  or hydroxy( $C_1-C_6$ )alkyl);  
         $R^{17}$ ,  $R^{18}$  and  $R^{19}$  are independently selected from the group consisting of  
        H, ( $C_1-C_6$ )alkyl, phenyl, and benzyl;

10      $R^{20}$  is H, ( $C_1-C_6$ )alkyl, phenyl, benzyl,  $-C(O)R^6$  or  $-S(O)_2R^6$ ;  
         $R^{21}$  is 1 to 3 moieties independently selected from the group consisting of  
        H, -CN,  $-CF_3$ ,  $-OCF_3$ , halogen,  $-NO_2$ , ( $C_1-C_6$ )alkyl, -OH, ( $C_1-C_6$ )alkoxy,  
 $(C_1-C_6)$ -alkylamino-, di-(( $C_1-C_6$ )alkyl)amino-,  $NR^{25}R^{26}(C_1-C_6)\text{alkyl-}$ ,  
hydroxy- $(C_1-C_6)\text{alkyl-}$ ,  $-C(O)OR^{17}$ ,  $-C(O)R^{17}$ ,  $-NHC(O)R^{16}$ ,  $-NHS(O)_2R^{16}$ ,  
15      $-NHS(O)_2CH_2CF_3$ ,  $-C(O)NR^{25}R^{26}$ ,  $-NR^{25}-C(O)-NR^{25}R^{26}$ ,  $-S(O)R^{13}$ ,  $-S(O)_2R^{13}$  and  
 $-SR^{13}$ ;  
         $R^{22}$  is H or ( $C_1-C_6$ )alkyl;  
         $R^{23}$  is H, ( $C_1-C_6$ )alkyl,  $-C(O)R^{24}$ ,  $-S(O)_2R^{24}$ ,  $-C(O)NHR^{24}$  or  $-S(O)_2NHR^{24}$ ;  
         $R^{24}$  is ( $C_1-C_6$ )alkyl, hydroxy ( $C_1-C_6$ )alkyl or  $NR^{25}R^{26}-((C_1-C_6)\text{alkyl})-$ ;  
20      $R^{25}$  and  $R^{26}$  are independently selected from the group consisting of H and  
        ( $C_1-C_6$ )alkyl;  
         $R^{27}$  is 1, 2 or 3 moieties selected from the group consisting of H,  
        ( $C_1-C_6$ )alkyl, ( $C_3-C_6$ )cycloalkyl, ( $C_1-C_6$ )alkoxy, halogen and -OH; and  
         $R^{28}$  and  $R^{29}$  are independently selected from the group consisting of H,  
25     ( $C_1-C_6$ )alkyl, ( $C_1-C_6$ )alkoxy,  $R^{27}$ -aryl( $C_1-C_6$ )alkyl, heteroaryl, heteroarylalkyl,  
        hydroxy( $C_1-C_6$ )alkyl, ( $C_1-C_6$ )alkoxy( $C_1-C_6$ )alkyl, heterocyclyl, heterocyclylalkyl, and  
        haloalkyl; or  
         $R^{28}$  and  $R^{29}$  taken together form a spirocyclic or a heterospirocyclic ring of 3-  
        6 atoms,  
30     wherein said therapeutic condition is a cardiovascular or circulatory disease  
        or condition, an inflammatory disease or condition, a respiratory tract disease or  
        condition, cancer, acute renal failure, glomerulonephritis, astrogliosis, a fibrotic  
        disorder of the liver, kidney, lung or intestinal tract, Alzheimer's disease, diabetes,  
        diabetic neuropathy, rheumatoid arthritis, neurodegenerative disease, neurotoxic  
35     disease, systemic lupus erythematosus, multiple sclerosis, osteoporosis,

5       glaucoma, macular degeneration, psoriasis, radiation fibrosis, endothelial dysfunction, a wound or a spinal cord injury, or a symptom or result thereof.

10      10. The method of claim 9 wherein the cardiovascular or circulatory disease or condition is atherosclerosis, restenosis, hypertension, acute coronary syndrome, angina pectoris, arrhythmia, heart disease, heart failure, myocardial infarction, thrombotic or thromboembolic stroke, a peripheral vascular disease, deep vein thrombosis, venous thromboembolism, a cardiovascular disease associated with hormone replacement therapy, disseminated intravascular coagulation syndrome, renal ischemia, cerebral 15     stroke, cerebral ischemia, cerebral infarction, migraine, renal vascular homeostasis or erectile dysfunction.

20      11. The method of claim 9 wherein the inflammatory disease or condition is irritable bowel syndrome, Crohn's disease, nephritis or a radiation- or chemotherapy- induced proliferative or inflammatory disorder of the gastrointestinal tract, lung, urinary bladder, gastrointestinal tract or other organ.

25      12. The method of claim 9 wherein the respiratory tract disease or condition is reversible airway obstruction, asthma, chronic asthma, bronchitis or chronic airways disease.

30      13. The method of claim 9 wherein the cancer is renal cell carcinoma or an angiogenesis related disorder.

35      14. The method of claim 9 wherein the neurodegenerative disease is Parkinson's disease, amyotrophic lateral sclerosis, Alzheimer's disease, Huntington's disease or Wilson's disease.

15. The method of claim 9 further comprising administering at least one therapeutically effective agent useful in the treatment of inflammation,

5       rheumatism, asthma, glomerulonephritis, osteoporosis, neuropathy and/or malignant tumors, angiogenesis related disorders, cancer, disorders of the liver, kidney or lung, melanoma, renal cell carcinoma, renal disease, acute renal failure, chronic renal failure, renal vascular homeostasis, glomerulonephritis, chronic airways disease, bladder inflammation,

10      neurodegenerative and/or neurotoxic diseases, conditions, or injuries, radiation fibrosis, endothelial dysfunction, periodontal diseases or wounds.

16.     The method of claim 15 further comprising administering at least two therapeutically effective agents.

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